

## DCASR DALLAS TQM ORGANIZATIONAL STRUCTURE

(2)

A. The Executive Steering Committee (ESC). The ESC's functions include but are not limited to the following: promoting efforts to identify and establish a critical mass of trained personnel at the DCASR so that TQM will eventually be self sustaining; developing TQM philosophy and policy; developing the initial TQM plan; formulating a vision statement and incorporating TQM in the strategic plan for the DCASR; developing training programs in topics such as statistics and group dynamics; creating and overseeing the Quality Council (QC); identifying and prioritizing the processes that will require QC action; monitoring and modifying the implementation plan as appropriate; identifying and removing poor management practices; identifying and removing all barriers to effective implementation of TQM; providing the long-term management and commitment required to create and sustain unity and constancy of purpose throughout the organization; institutionalizing TQM as a permanent culture change at DCASR. The region commander and deputy serve as chairperson and vice-chairperson, respectively. Members are directors of DCASR DAL-A, C, K and Q.

B. Quality Council (QC). The QC is the implementing body and working group of the ESC. All goals, policies, and decisions are made by the ESC and articulated to this working group. The QC gets everyone involved in a team approach. The QC creates and oversees the Quality Management Boards (QMB) and the Process Action Teams (PAT). Members of the QC are: DCASR DAL-A, C, K and Q representatives along with the directors of DCASR DAL-L, W, Z, and the chief of staff offices for DCASR DAL-DB, DI, DK, DU and DW. The representatives for the DCASMAs and DCASPROs will be the commanders of DCASMA Dallas and DCASPRO Texas Instruments, with the commanders of DCASMA San Antonio and DCASPRO Rockwell International as alternates.

C. Quality Management Boards (QMB). QMBs provide crucial structural support for the total quality management concept. They create a vehicle not only for interdepartmental communications, but also for communications up and down the chain of command. The board includes representatives at the same level from different departments as well as representatives from the next higher and next lower levels of authority. Any issue that cannot be resolved at the level where it is introduced is referred to the next lower or higher level board. Thus, decision making at the appropriate level is encouraged.

D. Process Action Teams (PAT). The purpose of the PAT is to deal with a specific cause identified by a QMB and to eliminate the cause permanently. Once the cause has been eliminated, the PAT identifies control points in the process and establishes measurement devices. They then give the measurement devices to the QMB so the board can monitor quality. At this point the PAT is dissolved. Both a steering committee member and a facilitator can be assigned to oversee and guide each PAT as it progresses. Members for the specific PAT are selected by its team leader, who is appointed by the QMB.

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DCASR DALLAS  
TOTAL QUALITY MANAGEMENT IMPLEMENTATION PLAN

	<u>OPI</u>	<u>DATE</u>
1. Establish Executive Steering Committee.	D	23 Dec 88
a. Issue letter of establishment.		
b. Designate Productivity Principal.		
c. Prepare letter to DLA.		
2. Steering Committee Initial Meeting.	A,C,D, K,Q	05 Jan 89
a. Approve Initial Training Plan (must be submitted by 9 Jan).		
b. Determine training nominations.	"	05 Jan 89
c. Discuss Enriched Environment.		
3. Task funding statement to DLA-CB.	CB/CO	06 Feb 89
4. Contract for training and issue DD 1556s.	CO/K	05 Jan 89
5. Respond to DLA-CO regarding work teams.	CO	13 Jan 89 (cancelled)
6. Steering Committee to formulate a vision and philosophy for organization's quality efforts and issue policy statement.	D,A,C, K,Q	Feb/Mar 89
7. Establish Quality Council.	All Dir.	Mar/Apr 89
a. Issue official letter on establishment.	Rep. from Field Offices	
b. Hold meeting to announce vision, philosophy and training to take place.		
8. Plan to DLA-CO on how we intend to keep employee's informed on "Gee Whiz" information and how we serve our customers.	DB/CO	Mar 89
9. Develop a structured orientation on the concept of "internal-external customers".	K/CO input from all	Mar/Apr 89
10. Secure outline of cross-training plan used at DISC and evaluate for cross-training our employees.	K/CO	Mar 89

FBI/DOJ/DOA/DOJ

	<u>OPI</u>	<u>DATE</u>
.. Prepare an orientation to be given to each manager and supervisor on an enriched environment.	CO/ DLA-CO	Mar/Apr 89
12. Conduct a study and develop an implementation plan to improve needed/adequate services for employees; e.g., parking, snack bars/vending, break rooms, security, lighting, furniture and equipment.	CO/L	Mar-May 89
13. Develop and submit plan to DLA on child care requirements.	CB/CO/ L	Mar-May 89
14. Develop and submit plan to DLA on fitness availability for each major organization.	CB/CO/ L	Mar-May 89
15. Develop and submit plan to DLA on improvements to the physical environment; e.g., minor construction, repairs, painting, ventilation, and temperature control, etc.	CB/CO/ L	Mar-May 89
16. Develop a plan for increased recognition and reward for quality and productivity gains; e.g., locally established incentives and privileges, on the spot cash awards, annual awards banquet.	CO/CB/ K	Mar-May 89
17. Develop a TQM Strategy.		
a. Approach to institutionalizing quality in the organization.	Steering Committee through Quality Council	Apr/May 89
b. Develop structure for total quality efforts, establish local quality management boards.	Each Directorate	Apr/May 89
c. Incorporate TQM activities into the strategic and business planning process.	Steering Committee	Apr/May 89
(1) Conduct an off site long range planning session.		
(2) Issue planning statement of principles.		

	<u>OPI</u>	<u>DATE</u>
d. Establish a system for organization units to set quality improvement goals.	Quality Council through Quality Management Boards	Apr/May 89
18. Establish a Process Action Team (PAT) with representatives from all organizations to identify and harmonize those policies, guidelines, regulation and laws which conflict with TQM.	Quality Council through Process Action Team	Apr-Dec 89
19. Establish a PAT across organization lines to review existing initiatives for conformance under the TQM umbrella.	Quality Council through Process Action Team	Apr-Dec 89
20. Select Organization(s) to implement SPC. <ul style="list-style-type: none"> <li>a. Determine readiness.</li> <li>b. Decide on scope of implementation (across the organization or within a limited number of components).</li> </ul>	Quality Council and Quality Management Boards	Apr-Jun 89
21. Develop a strategy and a program to sensitize industry to TQM and encourage adoption.	Executive Steering Committee through DAL-A/DB	May-Jun 89
22. Identify Standards and Measures. <ul style="list-style-type: none"> <li>a. Ensure that organizational units develop standards for measuring whether products and services meet customer requirements.</li> <li>b. Adjust existing measurement and management systems to measure whether customer requirements are being met.</li> </ul>	Quality Council	May/Jun 89
23. Initial SPC Project Implementation.	Design. Organization(s)	May/Jun 89

	<u>OPI</u>	<u>DATE</u>
... Demonstrate an uncompromising commitment to buying and supplying the highest quality products and services through the following initiatives:	Executive Steering Committee through the following:	
a. Reduce the potential for non-conforming material entering the DoD logistics pipeline.	A/Q	May-Dec 89
b. Encourage contractors to reduce costs associated with production inefficiency and poor quality.	A/Q	May-Dec 89
c. Enhance communications with corporate management.	A/Q	May-Dec 89
d. Evaluate effectiveness of contractor use of SPC and other analytical techniques.	Q	May-Dec 89
e. Train the ACO teams in SPC and other analytical techniques.	A	May-Dec 89
f. Eliminate poor performers during reaward surveys.	A	May-Dec 89
g. Provide current information to buying and specification control activities regarding to technical data, which may require Government action.	A/Q	May-Dec 89
h. Pursue quality producers which will allow reduction in contract management oversight.	A/Q	May-Dec 89
25. Institutionalize TQM.		
a. Institutionalize systems for training, involving, rewarding and recognizing employees.	Quality Council	May-Dec 89
b. Institutionalize strategies, goal setting and measurement of improvements in quality.		
c. Institutionalize process analysis and structured problem solving approaches.		
26. Monitor and Evaluate Results.	CO	May-Dec 89
a. Monitor the progress of teams on quality improvement projects.		
b. Track quality improvements against goals.		

	<u>OPI</u>	<u>DATE</u>
.. Publicize and Recognize.	CO/DB	May-Dec 89
a. Publicize successes.		
b. Reward and recognize quality improvement.		
c. Promote TQM throughout the organization.		
28. Adjust the TQM Process.	Quality Management Boards	May-Dec 89
a. Use feedback to modify and improve the process.		
b. Expand to other segments of the organization.		
29. Continuous Improvement.	Quality Management Boards	May-Dec 89
a. Select new processes to improve.		
b. Continue to improve all processes to remove defects.		

SUMMARY OF DCASR DALLAS TQM TRAINING PLAN  
FY-89 AND FY-90

Our training plan is a comprehensive approach to making efficient use of limited dollars to purchase, borrow, develop and deliver the best training resources available balanced against our need to press forward quickly with the following: expensive long-term investments in new training, major new commitments to quality in all facets of our operations, and the sweeping changes demanded of workers, management, and the overall organization in the new economic age. We have taken several steps to keep our costs low:

- a. Over half of our Deming Seminar attendees will go to the Dallas session, saving travel and per diem dollars.
- b. The Investment in Excellence tapes will be borrowed from DCPSO, saving \$13,000.
- c. All of our SPC training will be conducted by our University of Tennessee graduates, Dr. Virgil Rehg from AFIT, and the use of the Dr. Lloyd Nelson videotapes, saving on fee and tuition costs.
- d. The purchase of the Deming videotapes will enable us, at a small fee compared to seminar costs, to indoctrinate all managers, supervisors, and key employees with the TQM philosophy.
- e. The use of the University of Tennessee for training will save us money in the long run in terms of payback. The University has more experience in this area than any other training resource. By using others' "lessons learned", we will avoid some of the less-effective efforts of other organizations.
- f. We will work with local colleges and universities to tailor courses to our needs, previously identified by our work with the University of Tennessee. Our eventual goal is to be able to conduct all of our training in-house.

Our plan consists of acquiring and institutionalizing the following three major components: (1) Total Quality Management (TQM) Philosophy, (2) Statistical Process Control (SPC), and (3) culture change.

1. TQM PHILOSOPHY - Acquiring and institutionalizing consists of five steps:

- a. W. EDWARDS DEMING SEMINARS - During FY-89/90 we plan to send 60 people to participate in Dr. Deming's seminars. Those selected by the steering committee to attend will be our very top key people, almost exclusively GM-13s and above and military commanders and deputies. From this "critical mass", the philosophy will begin to permeate the organization from the top down.

b. VIDEOTAPE DEMING SEMINAR

(1) Approximately 65 remaining GM-13s and appropriate military officers, will receive a five day course consisting of the four day Deming videotape presentations with additional directed discussion and summary by one of the "critical mass" mentioned above.

(2) Approximately 125 remaining supervisors and an indefinite number of other key employees will receive the five day videotape based course mentioned above.

c. TQM OVERVIEW - A locally developed one day course will be presented to the balance (approximately 1500) of the work force.

d. TQM BOOKS - Our library of the best writings on TQM will be available in each DCASMA/DCASPRO and the region. Commanders and senior managers will be leading discussion groups on these writings.

e. ADVISORS AND GUEST SPEAKERS - As we proceed with implementation of the philosophy, we plan to present advisors and guest speakers.

2. STATISTICAL PROCESS CONTROL (SPC) - Acquiring and institutionalizing consists of five steps:

a. UNIVERSITY OF TENNESSEE - During FY-89/90 we plan to acquire the following training to develop resident experts:

(1) Senior Executive Course - We will send our top four executives to this intensive course which ties TQM and SPC together. Selectees will be members of the steering committee.

(2) Service and Administrative Course - We will send four senior managers to this intensive course which relates TQM and SPC to service rather than manufacturing environments. Selectees will be members of the steering committee or the quality council.

(3) SPC Course - We will send four people selected on math background to become our resident experts in SPC. This intensive three week course, covered over three nonconsecutive weeks with assignments to be completed at the work site, is nationally recognized as one of the best.

(4) Design of SPC Experiments - Our foremost expert in SPC will receive this advance course which will enable us to employ complex computer applications of SPC.

b. SPC OVERVIEW FOR MANAGERS - A three day SPC overview course will be presented to all of our top managers and supervisors (approximately 250). All members of the quality council would be required to attend this training. This course will be presented by Dr. Rehg of the Air Force Institute of Technology in conjunction with our University of Tennessee

graduates.

c. SPC VIDEOTAPES BY DR. LLOYD NELSON - This four day course consists of three days of interactive videotapes, SPC workbook and one day of discussion and summary. The course will be presented by our University of Tennessee graduates and Dr. Rehg, AFIT, as available, to employees with actual hands on responsibility for SPC applications. While all employees could receive this training or selected portions, it would be required for members of Quality Management Boards (QMB) and Process Action Teams (PATs). It is estimated that 1/3 of our work force would receive this training during FY-89/90.

d. SPC OVERVIEW FOR WORK FORCE - A one day SPC overview will be developed by our University of Tennessee graduates to be presented to the balance of our employees (approximately 2/3 of our work force). Everyone must be aware of SPC's power to improve quality.

e. ADVISORS AND GUEST SPEAKERS - As we proceed with applications of SPC, we will provide our resident experts access to advisors, especially from University of Tennessee, to gauge our progress.

3. CULTURE CHANGE - Acquiring and institutionalizing consists of five steps:

a. STRATEGIC PLANNING - A one day videotape and slide presentation for approximately 125 top managers (commanders and GM-13s and above) which encapsulates the Investment in Excellence presentations given to all employees.

b. INVESTMENT IN EXCELLENCE - A three day videotape series which helps individuals to reach their full potential. This course will be offered to all employees (about 1600) less the top managers attending the strategic planning. It will be facilitated by our locally developed facilitators trained by DCPSO. The videotapes for this course will be borrowed from DCPSO saving \$13,000.

c. INTENSIVE TEAM GROUP THEORY - During FY-89/90 approximately 200 people involved in our first phase of SPC applications will receive a series of four, one day, intensive courses, presented on-site by the University of Tennessee, generally described as follows:

- (1) Group Dynamics
- (2) Problem Solving
- (3) Team Building
- (4) Human Relations

These courses will be custom tailored for DCASR Dallas according to on-site surveys by the University of Tennessee.

d. TEAM GROUP THEORY FOR THE WORK FORCE - In conjunction with the University of Tennessee, we will develop a series of one day courses presented by our facilitators to the balance of our work force (about 1600 employees). Some of the topics for these courses include: defining who we are; our common goals; our customers; defining quality; defining processes and variations; and, being part of a team for continuous improvement.

e. DEVELOP CONTINUOUS TRAINING PROGRAM - Our internal core group of facilitators will develop in conjunction with the University of North Texas, University of Texas at Dallas, other local colleges and universities, including the junior college system, an ongoing training program aimed at permanently changing the culture.

DCASR DALLAS  
SUMMARY OF TQM TRAINING COSTS  
FY-89

ATTACH.

I. ACQUIRING AND INSTITUTIONALIZING TQM PHILOSOPHY

A. DEMING SEMINARS AND ASSOCIATED FOLLOW-ON TRAINING: 30 Employees

1. Phase One: (20 Employees)

a. Deming Seminars:	
W. Edwards Deming	
- Cincinnati	36,340
b. How to Put the	
Deming Philosophy	
to Work	
Scherkenbach/Tribus	
- Newport Beach	26,220
c. Networking to Enhance	
Implementation of the	
Deming Philosophy	
- Dallas	<u>11,541</u>

74,101

2. Phase Two: (10 Employees)

a. Deming Seminars:	
W. Edwards Deming	
- San Jose	16,345
b. How to Put the	
Deming Philosophy	
to Work	
Scherkenbach/Tribus	
- Cincinnati	<u>11,856</u>

28,201

102,302 A

B. TQM LIBRARIES:

1. Books at Region/DCASMAS/DCASPROs (available to all employees) 3,800

2. Videocassette Loan Library to Tour Region (available to all employees): W. E. Deming: Out of the Crisis 3,900

7,700 B

C. TQM IMPLEMENTATION COURSE:  
(2 Employees)  
Navy Research Dev Center  
- San Diego 1,635 C

D. JURAN INSTITUTE SEMINAR:  
(1 Employee)  
Management Of Quality - Dallas 1,595 D

II. ACQUIRING AND INSTITUTIONALIZING  
STATISTICAL PROCESS CONTROL (SPC)

A. UNIVERSITY OF TENNESSEE:  
(2 Employees)

1. One Week Senior Executive Institute	6,948
2. Two Week Administrative and Service Institute	9,096
3. Three Week Statistical Process Control (SPC) Institute	<u>14,704</u>
	30,748 E

B. STATISTICAL PROCESS CONTROL(SPC)  
TRAINING (To all employees) 3,709

C. Lloyd S. Nelson: Statistics  
in Quality, Productivity, and  
Problem Solving

1. Purchase Videotapes	2,900
2. Purchase 200 Workbooks	<u>7,200</u>
	10,100
	13,839 F

III. ACQUIRING AND INSTITUTIONALIZING CULTURE CHANGE

WORK FORCE/ENRICHED ENVIRONMENT

1. Team Building (100 Employees: 4 courses each)	40,000
2. Investment in Excellence (To all employees at Region/DCASMAS/DCASPROs)	<u>3,663</u>
	43,663 H

IV. OVERVIEW/CONFERENCES/ADVISORS 5,460 I

GRAND TOTAL

206,942

## I. TQM PHILOSOPHY

### DEMING SEMINARS

Dr. W. Edwards Deming - We have chosen to build our TQM implementation plan and approach around the philosophy of Dr. Deming. The DoD has in effect "brought into" Deming by having him conduct his seminar to 420 senior Pentagon officials at the end of Apr 88; and, the DoD Master Plan for TQM is structured around the Deming philosophy. Of course Dr. Deming's track record with Japan is unparalleled by any of the other management philosophies.

Dr. Deming's 14 points for management offers more of a structure to work from than other current management philosophy. We contend that Dr. Deming's philosophy is the most comprehensive approach to achieving a TQM environment. In addition to the voluminous documentation of the successful implementations of the "Deming Way", there is ongoing research in many organizations on improving the execution of the philosophy. Due to the popularity of Deming's management style, there are many consultants and organizations to help with the implementation and execution of his philosophy.

We fully support Dr. Deming's top management down orientation; and, we recognize the need to make radical changes in our culture to focus on quality. We believe that if we anchor our approach in Dr. Deming's "14 Obligations of Top Management" and fully utilize Statistical Process Control (SPC), after we have modified our culture, we will successfully show the constant improvement called for in the DoD Master Plan.

ATTACHMENT A

## I. TQM PHILOSOPHY

### DEMING FIRST PHASE FY-89

#### One day Intro to Deming/Four day Deming Seminar - Cincinnati (20 Slots)

Course Cost (20X200+20X745)	18,900
Travel (20 X 366)	7,320
Per Diem (5.5 X 76) X 20	8,360
AP Park/Local Trans. (6X5+20) X 20	1,000
AP LIMO (9X2X20)	360
TO AP and Park/Local Trans. (20X20)	400
	<u>36,340</u>

#### How to Put The Deming Philosophy To Work in Your Organization: Scherkenbach/Tribus - Newport Beach, CA (20 Slots)

Course Cost (20 X 500)	10,000
Travel (476 X 20)	9,520
Per Diem (114 X 2.5) X 20	5,700
AP Park/Local Trans. (3X5+20) X 20	700
Car Rental (5 X 30) X 2	300
	<u>26,220</u>

#### Networking to Enhance Implementation of Deming Philosophy - Dallas (20 Slots)

Course Cost (475 X 20)	9,500
Travel: San Antonio 63 X 2 = 126	
Phoenix 300 X 2 = 600	
New Orleans 110	836
Per Diem (108X2.5)X3	810
AP Park/Local Trans. (3X5+10) X 5	125
Car Rental (3X30) X 3	270
	<u>11,541</u>

GRAND TOTAL 74,101

## I. TQM PHILOSOPHY

### TQM LIBRARIES

1. BOOKS: We are in the process of establishing a TQM library of books for educating the work force on quality. We have purchased several of the most respected writings available on quality. Every employee will have access to these writings; and, the commanders/managers will encourage their reading by leading discussion groups on the various books. There will be copies of the following books at each DCASMA/DCASPRO and a copy at region for use by activities within the commuting area:

<u>TITLE</u>	<u>AUTHOR</u>
a. <u>Out of the Crisis</u>	Edwards W. Deming
b. <u>Total Quality Control</u> <u>Third Edition</u>	Armand V. Feigenbaum
c. <u>The Improvement Process:</u> <u>How America's Leading</u> <u>Companies Improve Quality</u>	James H. Harrington
d. <u>KAIZEN: The Key to Japan's</u> <u>Competitive Success</u>	Masaaki Imai
e. <u>What is Total Quality</u> <u>Control? The Japanese</u> <u>Way</u>	Kaoru Ishikawa
f. <u>Managerial Break Through</u>	J. M. Juran
g. <u>The Deming Route to</u> <u>Quality and Productivity:</u> <u>Road Maps and Roadblocks</u>	William W. Scherkenback
h. <u>World Class Manufacturing</u> <u>Casebook: Implementing</u> <u>JIT and TQC</u>	Richard J. Schonberger
i. <u>Commit to Quality</u>	Patrick L. Townsend
j. <u>Taguchi Techniques</u> <u>for Quality Engineering</u>	Phillip F. Ross
k. <u>Quality Planning and</u> <u>Analysis, Second Edition</u>	J. M. Juran and Frank M. Gryna
l. <u>The Deming Management</u> <u>Method</u>	Mary Walton

- m. The Deming Guide to Quality and Competitive Position Howard S. and Shelly Gitlon
- n. Economic Control of Quality of Manufactured Product Walter S. Shewhart
- o. Statistical Process Control Roger W. Berger and Thomas H. Hart
- p. Juran's Quality Control Handbook, Fourth Edition J. M. Juran
- q. Guide to Quality Control Kaoru Ishikawa
- r. Quality Assurance for Computer Software Robert Dunn and Richard Ullman

2. **VIDEOTAPES:** DEMING SEMINAR - After the initial round of Deming Seminar training to selected top management officials, middle and lower management officials will receive the interactive video course of Dr. Deming's Quality, Productivity, and Competitive Position. The videotape library will tour, along with a facilitator, all region locations.

**COSTS:**

Books	3,800
Deming Videotapes	
One set-15 tapes	<u>3,900</u>

GRAND TOTAL	<u>7,700</u>
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## I. TQM PHILOSOPHY

### NAVY PERSONNEL RESEARCH AND DEVELOPMENT CENTER (NPRDC) TQM IMPLEMENTERS' SEMINAR

Purpose of the Seminar: The seminar is designed to introduce the implementation strategy related to Total Quality Management (TQM) to individuals responsible for implementing TQM in their organizations. The seminar concerns a two-phase approach to implementation and offers attendees the opportunity to interact with NPRDC researches who have been assisting organizations in TQM.

Content: The seminar opens with a review of the basic concepts of total quality. The fundamentals of organizational change and the mechanics of the change process are presented and discussed. The two-phase implementation strategy addresses developing quality philosophy and policy statements, organizing for TQM, planning for near-term implementation, and educating the work force to TQM.

Instructors will describe the mechanics of continuous improvement and how this is accomplished through an organization's Executive Steering Committee, Quality Management Boards, and Process Action Teams. The Shewhart cycle forms the basis for a generic model of process improvement that can be applied to any process.

An outline of an implementation plan is presented that forms a model for near-term planning. Attendees may be able to complete critical steps in the plan, depending upon the degree to which TQM has already become institutionalized within their organization.

#### COSTS:

TQM Implementers' Seminar:  
Navy Personnel Research and  
Development Center San Diego - 2 Slots

Travel (2 X 364)	728
Per Diem (3.5 X 101) X 2	707
Car Rental 30 X 4	120
AP Park/Local Trans. (4X5+20) X 2	80
GRAND TOTAL	<u>1,635</u>

## I. TQM PHILOSOPHY

### JURAN INSTITUTE: MANAGEMENT OF QUALITY

1. Management of quality provides a comprehensive curriculum on planning, controlling and improving quality throughout the organization. Founded by Dr. J. M. Juran in 1946, the course is designed for managers from all functions and has been attended by over 20,000 managers in more than 30 countries. Since Dr. Juran's approach is slanted more toward the manufacturing and engineering disciplines, our director of quality assurance is to attend and compare for possible supplementation to the Deming philosophy.
2. Management of Quality gives managers from all industries the insights and understanding they need to improve quality and reduce costs within their organizations. In nontechnical terms and practical language, managers learn about quality-related activities across the company - not just in the manufacturing function. Marketing, product development, purchasing, personnel, customer service and other support functions can also contribute to improving quality and reducing costs; not just for quality of delivered product, but also quality of the activity itself.

### COSTS:

Juran Institute Seminar:  
Management of Quality,  
Dallas; 1 Employee

GRAND TOTAL

1,595

Attachment 1

## II. SPC

### UNIVERSITY OF TENNESSEE THE INSTITUTES FOR PRODUCTIVITY THROUGH QUALITY

The University of Tennessee is frequently mentioned in the case studies of companies achieving quality improvement through Statistical Process Control (SPC). We believe the university to be the premier institution on the leading edge of education in the total quality management arena.

Much of the success for the institutes for productivity through quality rests on its historical emphasis on program quality. Consistently high quality programs with small class sizes, outstanding faculty and a highly participatory and integrated style of instruction have become the institutes trademarks. Among the long list of the institute's participating companies are IBM, Ford, and Proctor and Gamble. Government entities represented are the U.S. Army, Navy and Defense Logistics Agency.

#### The University of Tennessee Institutes for Productivity Through Quality:

The Three Week Institute, after its initial offering in the fall of 1981, has been operated at capacity with students from primarily operational levels in organizations from virtually all segments of the U.S. economy. The successful implementation of the techniques taught in this course has brought impressive results to participating companies. Working from this initial course, four other courses have been developed and launched and others are in the design of development stage. The goal of the institute is to offer organizations an integrated set of consistent and comprehensive courses in applied statistical management. After participating in these courses, key people in an organization would have a set of critical skills to implement the required changes for long-term survival of the firm.

The Senior Executive Institute, a one week course for people at a policy setting level, which teaches the strategic responsibilities in a statistical management approach. This institute focuses on the corporate change responsibilities of senior level managers, and understanding of the concept of continuous improvement, an understanding of the processes and systems in an organization and the use of statistics and problem-solving tools to monitor and improve those systems.

The Administrative and Service Institute, a two week course for people in administrative and services environments, which teaches the application of the concepts of continuous improvement and statistical management to nonmanufacturing processes. The focus is on understanding the concept of continuous improvement and its application through the use of statistics and other tools to nonmanufacturing areas.

67707/11/11

II. SPC

UNIVERSITY OF TENNESSEE  
FY-89

Senior Executive Institute  
UT, Knoxville, TN One Week  
(2 Slots)

Course Cost (3000 X 2)	6,000
Travel (404 X 2)	808
AP LIMO (2 X 10) X 2	40
AP Park/Local Trans. (6X5+20) X 2	100
	<hr/>
	6,948

Service and Administration Institute  
(2 nonconstructive weeks)  
UT, Knoxville, TN - 2 Slots

Course Cost (3600 X 2)	7,200
Travel (404 X 2) X 2	1,616
AP LIMO (2 X 10) X 2 X 2	80
AP Parking/Local Trans. (6X5+20) X 2 X 2	200
	<hr/>
	9,096

Statistical Process Control  
(SPC) Institute (3 nonconstructive  
weeks) UT, Knoxville, TN - 2 Slots

Course Cost (5900 X 2)	11,800
Travel (404 X 3) X 2	2,424
AP LIMO (3 X 10) X 3 X 2	180
AP Parking/Local Trans. (6X5+20) X 3 X 2	300
	<hr/>
	14,704

GRAND TOTAL

30,748

## II. SPC

### STATISTICAL PROCESS CONTROL (SPC) FY-89

1. One of the points of the DoD Posture on Quality is "emphasis must change from relying on inspection, to designing and building quality into the process and product." SPC allows us to look at the process and products in an objective, uniform way. SPC is the most powerful tool available to work on the process and improve quality.
2. Education and retraining are necessary ingredients if managers are going to know what they are supposed to do and to promote a never-ending quality improvement process. They must learn what their role is in the long-term commitment process, and how they should behave; they need to learn the statistical methods and how they are used in the quality improvement process. We plan a series of three day overviews of SPC both at the region and the DCASMA level in FY-89. In FY-90 we will expand our training to the smaller and/or more remote areas.

#### COSTS:

Statistical Process Control  
Virgil Rehg - AFIT; WFAFB,  
Ohio; SPC Initial training and  
followup presented at region - 2 Trips

Travel (372 X 2)	744
Per Diem (6 X 108)	648
Car Rental (6 X 30)	180
AP Park/Local Trans. (6X5+20)	<u>50</u>
	1,622

SPC Training to Work Force  
3 Trips of 3 Days

Travel: San Antonio	63
Phoenix	300
New Orleans	<u>110</u>
Per Diem (108 X 3.5) X 3	473
Car Rental (4 X 30) X 3	1,134
AP Park/Local Trans. (4X5+30) X 3	<u>360</u>
	150
	2,117

## II. SPC (continued)

SPC - In conjunction with our SPC training, we have ordered the interactive video course Statistics in Quality Productivity and Problem Solving by Dr. Lloyd S. Nelson. Dr. Nelson is a long time associate of Dr. Deming and mentioned frequently in Deming's writings. The SPC video course will supplement our overview training by Dr. Rehg and our own in-house training from our University of Tennessee Institute graduates.

Purchase Nelson Videotapes (One 11 Tape Set)	2,900
Purchase 200 Workbooks (200 X 36)	<u>7,200</u>
	10,100

GRAND TOTAL	<u>13,839</u>
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### III. CULTURE CHANGE

#### WORK FORCE FY-89

The following work force training requirements are called for in the DLA Enriched Environment document:

- o Training each manager and supervisor
- o Organizing the work force into teams
- o Greater use of structured employee involvement groups
- o More internal as well as external customer orientation
- o A more flexible work force

In General Russo's letter of 25 May 88, subject: DoD Posture on Quality, he stated, "Recognize that a singular most important step is the need to change the mindset." The DLA TQM Master Plan, January 1989, on page 5, second paragraph states:

TQM is not just another program, fad, slogan, or "Buzz Word". It is a philosophy which will be rooted as a way of life within the DLA. Adopting this philosophy will require a cultural change in the way we think and do business.

In order to meet these requirements and produce the culture change that leads to a quality mindset, we must educate people on how to work together and operate as a team. Being part of a team group will require the removal of barriers and the installation of common goals.

We plan to tailor courses to our work force in the following areas:

Group Dynamics	First Phase FY-89:
Problem Solving	Train 100 people
Human Relations	\$100 per course
Team Building	4 courses

#### COSTS:

100 X 100 X 4 = 40,000

GRAND TOTAL	<u>40,000</u>
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11/11/1989 (M)

### III. CULTURE CHANGE

#### INVESTMENT IN EXCELLENCE FY-89

DLA Civilian Personnel Support Office (DCPSO) recently introduced a video program entitled "Investment in Excellence (IIE)". The program emphasizes organizational goal setting, individual high performance, and greater productivity. Because of its carefully programmed design, IIE has a built-in flexibility that makes it an interchangeable library of knowledge. The IIE may be offered as a comprehensive multiday course, taught in consecutive segments, or presented as minicourses to create or reinforce awareness in specific concepts.

PLFAs using the program have reported positive results. DPSC and DCASR Philadelphia have aggressive training plans for managers and other employees. DCASR Philadelphia sees it as the foundation for the "Total Quality Management" Program. DSAC is implementing the program DSAC-wide. DDOU is using it as a means to facilitate the "Pay for Knowledge" Program. DDTG, one of the first to try IIE, reports numerous benefits realized from using it.

#### INVESTMENT IN EXCELLENCE

a. (Facilitator Training) - 2 Trips  
DCPSO (Columbus) to Dallas

Travel (383 X 2)	766
Per Diem (108 X 5)	540
Car Rental (5 X 30)	150
AP Park/Local Trans. (5X5+20) X 2	90
	<u>1,546</u>

b. (Work Force Training)  
3 Trips of 3 Days  
From Region (Dallas) to Field

Travel: San Antonio	63
Phoenix	300
New Orleans	<u>110</u>
Per Diem (108 X 3.5) X 3	473
Car Rental (4 X 30) X 3	1134
AP Park/Local Trans. (4X5+30) X 3	360
	<u>150</u>
	<u>2,117</u>

GRAND TOTAL 3,663

#### IV. CONFERENCE/OVERVIEWS/ADVISEMENTS

1. DR. LINDA DOHERTY, Assistant Director, Navy Personnel Research and Development Center - Dr. Doherty and her group at San Diego assist and conduct research at activities implementing TQM. DCASR Philadelphia is one of their research sites, where they also perform as consultants through an interservice support agreement. Dr. Doherty is well respected and has assisted Dr. Deming in several of his seminars. We want Dr. Doherty to act as a consultant to our steering committee and assist in the DCASR Dallas implementation of TQM.
2. MR. STEVE MARTIN, University of Tennessee, Associate Director, Management Development Center - In addition to consulting with our steering committee and reviewing our implementation plan, we would like Mr. Martin to be our contact point with the University of Tennessee faculty for future short-term consulting. He would direct us to other available resources.
3. MR. RON RADER, University of Tennessee, Director, Center for Extended Learning - Mr. Rader has helped companies such as ALCOA develop training programs to "change the culture". In addition to consulting with our steering committee, Mr. Rader can perform an assessment of our training needs and recommend the required steps and/or courses to accomplish a change in culture. We could also elect to have UT conduct some on-site courses in culture change since their experience speaks for itself.
4. LT COL "SONNY" FOX, DCASR Boston - In addition to reviewing our TQM implementation plan and consulting with our steering committee, Lt Col Fox will conduct a series of overview presentations on TQM to the DCASR Dallas work force. A graduate of the University of Tennessee's Senior Executive Institute, Lt Col Fox has been involved with successful SPC applications at DCASR Boston. He is a dynamic speaker with an ability to deliver the TQM philosophy in an interesting, easy to follow manner.

ATTACHMENT 1

IV. CONFERENCES/OVERVIEWS/ADVISEMENTS  
FY-89

Dr. Linda Doherty, Navy Personnel  
Research and Development Center,  
Assistant Director, San Diego

2 Trips

Travel (364 X 2)	728
Per Diem (2.5X108)X2	540
Car Rental (30 X 2)X2	120
AP Park/Local Trans. (2X5+20)X2	60
	<hr/>
	1448

Mr. Steve Martin - UT, Knoxville, TN  
Associate Director: Center for Quality  
and Productivity; Consult on TQM Plan

2 Trips

Travel (404 X 2)	808
Per Diem (1.5 X 108) X 2	324
Car Rental (30 X 2)	60
AP Park/Local Trans. (2X5+20)X2	60
	<hr/>
	1252

Mr. Ron Rader - UT, Knoxville, TN  
Center for Extended Learning;  
Consult on TQM Plan

2 Trips

Travel (404 X 2)	808
Per Diem (1.5 X 108)X2	324
Car Rental (30 X 2)	60
AP Park/Local Trans. (2X5+20)X2	60
	<hr/>
	1252

Lt Col "Sonny" Fox - DCASR  
Boston - TQM Overview

2 Trips

Travel (394 X 2)	788
Per Diem (2.5 X 108) X 2	540
Car Rental (2 X 30) X 2	120
AP Park/Local Trans. (2X5+20)X2	60
	<hr/>
	1508

GRAND TOTAL

5,460

DCASR DALLAS  
SUMMARY OF TQM TRAINING COSTS  
FY-90

ATTACH.

I. ACQUIRING AND INSTITUTIONALIZING TQM PHILOSOPHY

DEMING PHASE THREE: 30 Employees

1. Deming Seminars: W. Edwards Deming - Dallas	22,350
2. How to Put the Deming Philosophy to Work Scherkenbach/Tribus - Dallas	15,000
3. Travel associated with above training	<u>18,775</u>
	56,125 A

II. ACQUIRING AND INSTITUTIONALIZING  
STATISTICAL PROCESS CONTROL (SPC)

A. UNIVERSITY OF TENNESSEE:  
(2 Employees)

1. One Week Senior Executive Institute	6,948
2. Two Week Administrative and Service Institute	9,096
3. Three Week Statistical Process Control (SPC) Institute	14,704
4. Three Week Design of Experiments (only one employee)	<u>7,652</u>
	38,400 B

B. SPC (To remote locations  
and all employees not  
covered in FY-89)

Purchase additional workbooks for Nelson Videotape course (300 X 36)	<u>10,800</u>
	13,396 C

I. ACQUIRING AND INSTITUTIONALIZING CULTURE CHANGE.

WORK FORCE/ENRICHED ENVIRONMENT

1. Team Building (100 Employees: 4 courses each)	42,117
2. Investment in Excellence (To remote locations and all employees not covered in FY-89)	<u>2,596</u> 44,713 D

IV. OVERVIEW/CONFERENCES/CONSULTANTS

4,706 E

GRAND TOTAL

157,340

I. TQM PHILOSOPHY

DEMING THIRD PHASE  
FY-90

Four day Deming Seminar  
- Dallas 31 Oct - 4 Nov (30 Slots)

Course Cost (745 X 30) 22,350

How to Put the Deming  
Philosophy to Work in Your  
Organization: Scherkenbach/  
Tribus - Dallas 16-17 Nov  
(30 Slots)

Course Cost (500 X 30) 15,000

Estimated Travel: Deming  
Third Phase Dallas  
15 People

Travel (200 X 15) X 2	6,000
Per Diem (108 X 15) X 7	11,340
Car Rental (30 X 5) X 7	1,050
IP Park/Local Trans. (7X5+20) X 7	<u>385</u>
	18,775

GRAND TOTAL 56,125

II. SPC

UNIVERSITY OF TENNESSEE  
FY-90

Senior Executive Institute  
UT, Knoxville, TN One Week  
(2 Slots)

Course Cost (3000 X 2)	6,000
Travel (404 X 2)	808
AP LIMO (2 X 10) X 2	40
AP Park/Local Trans. (6X5+20) X 2	<u>100</u>
	6,948

Service and Administration Institute  
(2 nonconstructive weeks)  
UT, Knoxville, TN (2 Slots)

Course Cost (3600 X 2)	7,200
Travel (404 X 2) X 2	1,616
AP LIMO (2 X 10) X 2 X 2	80
AP Parking/Local Trans. (6X5+20) X 2 X 2	<u>200</u>
	9,096

Statistical Process Control  
(SPC) Institute (3 nonconstructive weeks)  
UT, Knoxville, TN (2 Slots)

Course Cost (5900 X 2)	11,800
Travel (404 X 3) X 2	2,424
AP LIMO (3 X 10) X 3 X 2	180
AP Parking/Local Trans. (6X5+20) X 3 X 2	<u>300</u>
	14,704

Design of Experiments\*  
(3 nonconstructive weeks)  
UT, Knoxville, TN (1 Slot)

Course Cost	6,200
Travel (404 X 3)	1,212
AP LIMO (3 X 10) X 3	90
AP Parking/Local Trans. (6X5+20) X 3	<u>150</u>
	7,652
GRAND TOTAL	<u>38,400</u>

\* This is an added course from the FY-89 curriculum. The Design of Experiments Institute, a three week course for people who have been involved in the application of statistics in their organizations. This course teaches more advanced statistical skills for further reducing the sources of variation in processes. The focus is on understanding and applying advanced statistical tools through carefully designed experiments in order to correlate the effect of specific variables on process variation.

II. SPC (continued)

STATISTICAL PROCESS CONTROL TRAINING  
FY-90

Statistical Process Control

Travel:	Houston	66	
	Albuquerque	114	
	Camden	62	
	Lake Charles	<u>162</u>	404

Per Diem (108 X 3.5) X 4	1512
Car Rental (4 X 30) X 4	480
AP Park/Local Trans. (4X5+30) X 4	<u>200</u>
	2,596

Purchase of additional workbooks for Nelson Videotapes course (300 X 36)	<u>10,800</u>
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GRAND TOTAL 13,396

ATTACHMENT C

### III. CULTURE CHANGE

FY-90

#### Work Force: Enriched Environment/ Team Building

Group Dynamics	Second Phase FY-90
Problem Solving	Train 100 people
Human Relations	\$100 per course
Team Building	4 courses

40,000

Travel:	San Antonio	63
	Phoenix	300
	New Orleans	<u>110</u>

473

Per Diem (108 X 3.5) X 3	1134
Car Rental (4 X 30) X 3	360
AP Park/Local Trans. (4X5+30) X 3	<u>150</u>

2,117

42,117

#### Investment in Excellence

Travel:	Houston	66
	Albuquerque	114
	Camden	62
	Lake Charles	<u>162</u>

404

Per Diem (108 X 3.5) X 4	1512
Car Rental (4 X 30) X 4	480
AP Park/Local Trans. (4X5+30) X 4	<u>200</u>

2,596

GRAND TOTAL

44,713

ATTACHMENT D

IV. CONFERENCES/OVERVIEWS/ADVISEMENTS  
FY-90

Dr. Linda Doherty, Navy Personnel  
 Research and Development Center,  
 Assistant Director, San Diego,  
 TQM Presentation and Assist on  
 Implementation Plan

2 Trips

Travel (364 X 2)	728
Per Diem (2.5X108) X 2	540
Car Rental (30 X 2) X 2	120
AP Park/Local Trans. (2X5+20) X 2	60
	<hr/>
	1448

Mr. Steve Martin - UT, Knoxville, TN  
 Associate Director: Center for Quality  
 and Productivity; Consult on TQM Plan

2 Trips

Travel (404 X 2)	808
Per Diem (1.5 X 108) X 2	324
Car Rental (30 X 2)	60
AP Park/Local Trans. (2X5+20) X 2	60
	<hr/>
	1252

Mr. Ron Rader - UT, Knoxville, TN  
 Center for Extended Learning;  
 Consult on TQM Plan

2 Trips

Travel (404 X 2)	808
Per Diem (1.5 X 108) X 2	324
Car Rental (30 X 2)	60
AP Park/Local Trans. (2X5+20) X 2	60
	<hr/>
	1252

Lt Col "Sonny" Fox - DCASR  
 Boston; TQM Overview

1 Trip

Travel	394
Per Diem (2.5 X 108)	270
Car Rental (2 X 30)	60
AP Park/Local Trans. (2X5+20)	30
	<hr/>
	754

GRAND TOTAL

4,706

ATTACHMENT

II. SPC

UNIVERSITY OF TENNESSEE  
FY-89

Senior Executive Institute  
UT, Knoxville, TN One Week  
(2 Slots)

Course Cost (3000 X 2)	6,000
Travel (404 X 2)	808
AP LIMO (2 X 10) X 2	40
AP Park/Local Trans. (6X5+20) X 2	<u>100</u>
	6,948

Service and Administration Institute  
(2 nonconstructive weeks)  
UT, Knoxville, TN - 2 Slots

Course Cost (3600 X 2)	7,200
Travel (404 X 2) X 2	1,616
AP LIMO (2 X 10) X 2 X 2	80
AP Parking/Local Trans. (6X5+20) X 2 X 2	<u>200</u>
	9,096

Statistical Process Control  
(SPC) Institute (3 nonconstructive  
weeks) UT, Knoxville, TN - 2 Slots

Course Cost (5900 X 2)	11,800
Travel (404 X 3) X 2	2,424
AP LIMO (3 X 10) X 3 X 2	180
AP Parking/Local Trans. (6X5+20) X 3 X 2	<u>300</u>
	14,704

GRAND TOTAL

30,748

E

IV. CONFERENCES/OVERVIEWS/ADVISEMENTS  
FY-90

Dr. Linda Doherty, Navy Personnel  
 Research and Development Center,  
 Assistant Director, San Diego,  
 TQM Presentation and Assist on  
 Implementation Plan

2 Trips

Travel (364 X 2)	728
Per Diem (2.5X108) X 2	540
Car Rental (30 X 2) X 2	120
AP Park/Local Trans. (2X5+20) X 2	60
	<u>1448</u>

Mr. Steve Martin - UT, Knoxville, TN  
 Associate Director: Center for Quality  
 and Productivity; Consult on TQM Plan

2 Trips

Travel (404 X 2)	808
Per Diem (1.5 X 108) X 2	324
Car Rental (30 X 2)	60
AP Park/Local Trans. (2X5+20) X 2	60
	<u>1252</u>

Mr. Ron Rader - UT, Knoxville, TN  
 Center for Extended Learning;  
 Consult on TQM Plan

2 Trips

Travel (404 X 2)	808
Per Diem (1.5 X 108) X 2	324
Car Rental (30 X 2)	60
AP Park/Local Trans. (2X5+20) X 2	60
	<u>1252</u>

Lt Col "Sonny" Fox - DCASR  
 Boston; TQM Overview

1 Trip

Travel	394
Per Diem (2.5 X 108)	270
Car Rental (2 X 30)	60
AP Park/Local Trans. (2X5+20)	30
	<u>754</u>

GRAND TOTAL

4,706

# REPORT DOCUMENTATION PAGE

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13. ABSTRACT (Maximum 200 words) This document contains the DCASR Dallas plan for TQM implementation. It includes organizational structure, goals with milestones and training plan. The training plan portion of the document lists specific courses for training in TQM philosophy, statistical process control and culture change.			
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